AMENDMENTS TO THE CLAIMS

The listing of claims below replaces all prior versions of claims in the application.

1. (Currently Amended) A method for sorting and recovering fine particles that are responsive to optical pressure, the method comprising

using an apparatus for recovering fine particles comprising a laser beam emitter that has two or more emitting apertures and a collector that has two or more chambers corresponding in number to the number of emitting apertures, emitting ~~a laser~~ each laser beam from the laser beam emitter to a flow path of a gas or liquid containing

fine particles that are responsive to optical pressure and

a component or components that are irresponsive to optical pressure,

in such a manner that the laser beam crosses the flow direction of the gas or liquid, to selectively deflect the direction of movement of only the fine particles that are responsive to optical pressure, in the direction of convergence of the laser beam, while adjusting the laser beam so as to converge inside each chamber of the collector facing each laser beam emitting aperture with the flow path interposing therebetween,

thereby sorting the fine particles from the component or components that are irresponsive to optical pressure, and recovering the fine particles in the chambers of the collector.

2. (Original) The method according to claim 1, wherein the fine particles are selected from the group consisting of organic or inorganic polymeric materials, metals, cells, microorganisms and biopolymers, all of which are responsive to optical pressure.

3. (Currently Amended) A method for sorting and recovering target fine particles, comprising

using an apparatus for recovering fine particles comprising a laser beam emitter that has two or more emitting apertures and a collector that has two or more chambers corresponding in number to the emitting apertures, irradiating with ~~a laser~~ each laser beam from the laser beam emitter the target fine particles, which are responsive to optical pressure, in a flow path of a gas or liquid containing

fine particles that are responsive to optical pressure and

a component or components that are irresponsive to optical pressure,

in such a manner that the laser beam crosses the flow direction of the gas or liquid, to selectively deflect the direction of movement of only the target fine particles in the direction of convergence of the laser beam, while adjusting the laser beam so as to converge inside ~~the chamber~~ each chamber of the collector facing ~~the laser~~ each laser beam emitting aperture with the flow path interposing therebetween,

thereby sorting the target fine particles from other fine particles and the component or components that are irresponsive to optical pressure, and recovering the target fine particles in the chambers of the collector.

4. (Original) The method according to claim 3, wherein the flow path is a flow path of a liquid.

5. (Original) The method according to claim 3, wherein the target fine particles are selected from the group consisting of organic or inorganic polymeric materials, metals, cells, microorganisms and biopolymers, all of which are responsive to optical pressure.

6. (Original) The method according to claim 3, wherein the target fine particles are cells or microorganisms.

7. (Original) A flow cytometry process in which the method according to claim 6 is used for sorting target cells.

8. (Currently Amended) An apparatus for recovering fine particles, comprising:

a collector for collecting fine particles that are responsive to optical pressure;

a laser beam emitter; and

a flow path for flowing a gas or liquid containing

fine particles that are responsive to optical pressure and

a component or components that are irresponsive to optical pressure,

the flow path being disposed between the collector and the laser beam emitter;

the collector having ~~at least one chamber~~ chambers corresponding in number to the emitting apertures, which are disposed so that the opening faces the flow path;

the laser beam emitter having at least ~~one~~ two emitting ~~aperture~~ apertures;

~~the opening of the chamber of the collector facing the emitting aperture of the laser beam emitter with the glow path interposing therebetween;~~ and

the apparatus being configured so as to emit a laser beam from ~~the emitting~~ each emitting aperture toward the opening of ~~the chamber~~ each chamber of the collector in such a manner that the laser beam crosses the flow path and converges inside the opening.

9-10. (Canceled)

11. (Original) The apparatus according to claim 8, further comprising detection and analysis portions for detecting and analyzing fine particles in the gas and liquid passing through the flow path.

12. (Original) The apparatus according to claim 11, wherein the detection and analysis portions are linked to the laser beam emitter, so that the target fine particles are selected based on data obtained in the detection and analysis portions, and so that only the selected target fine particles are irradiated with the laser beam.

13. (Original) A cell sorter comprising the apparatus according to claim 8 as a sorting portion.

14. (Previously Presented) The method according to claim 1, wherein the fine particles responsive to optical pressure are recovered by changing the position of a collector or the chamber thereof, with the position of the laser beam emitting aperture being fixed.

15. (Previously Presented) The method according to claim 3, wherein the target particles are recovered by changing the position of a collector or the chamber thereof, with the position of the laser beam emitting aperture being fixed.

16. (Previously Presented) The apparatus according to claim 8, wherein the fine particles responsive to optical pressure are recovered by changing the position of a collector or the chamber thereof, with the position of the laser beam emitting aperture being fixed.